

Patent Claims

- 5 1. A compatible optical scanner (PU) with an improved
laser modulator (M2) for recording or reproduction
apparatuses of optical recording media, wherein
the optical scanner (PU) with an improved laser
modulator (M2) is a laser modulator (M2) that at
10 least partly or completely switches the laser
current, and a means for simulating the input
characteristic curve of a laser (LD1 or LD2) is
provided at its input (E).
- 15 2. The compatible optical scanner (PU) as claimed in
claim 1, wherein the means for simulating the
input characteristic curve of a laser (LD1 or LD2)
is a circuit arrangement that interacts with a
20 current mirror of the optical scanner (PU), said
current mirror being provided for regulating the
light power of a laser (LD1 or LD2).
3. The compatible optical scanner (PU) as claimed in
claim 2, wherein the current mirror of the optical
scanner (PU) that is provided for regulating the
25 light power of a laser (LD1 or LD2) is an
operational amplifier (OPV) driving a field-effect
transistor (FET), the noninverting input (+) of
which amplifier is connected to a line carrying
30 reference-ground potential (GD) via a first
resistor (R1), the inverting input (-) of the
operational amplifier (OPV) and the source of the
field-effect transistor (FET) being connected to
said line via a second resistor (R2), and the
35 drain of the field-effect transistor (FET) is an
output (Out) provided for regulating the light
power of a laser (LD1 or LD2).

4. The compatible optical scanner (PU) as claimed in claim 1, wherein a series circuit of diodes (D1...Dn) that is connected upstream of a current mirror of the optical scanner (PU) that is provided for regulating the light power of a laser (LD1 or LD2) is provided for simulating the input characteristic curve of a laser (LD1 or LD2).
- 10 5. The compatible optical scanner (PU) as claimed in claim 1, wherein a zener diode that is connected upstream of a current mirror of the optical scanner (PU) that is provided for regulating the light power of a laser (LD1 or LD2) is provided for simulating the input characteristic curve of a laser (LD1 or LD2).
- 15 6. The compatible optical scanner (PU) as claimed in claim 4, wherein the diodes (D1...Dn) form a series circuit of diodes (D1...Dn) arranged in the forward direction with a forward voltage (DD) corresponding to the operating voltage of a laser (LD1 or LD2).
- 20 25 7. The compatible optical scanner (PU) as claimed in claim 5, wherein a zener diode with a zener voltage corresponding to the operating voltage of a laser (LD1 or LD2) is provided.
- 30 8. The compatible optical scanner (PU) as claimed in claim 1, wherein the means for simulating the input characteristic curve of a laser (LD1 or LD2) is arranged on the optical scanner (PU).
- 35 9. The compatible optical scanner (PU) as claimed in claim 1, wherein the means for simulating the input characteristic curve of a laser (LD1 or LD2)

is integrated in the improved laser modulator (M2).

10. The compatible optical scanner (PU) as claimed in
5 claim 1, wherein the means for simulating the
input characteristic curve of a laser (LD1 or LD2)
is arranged on a main circuit board (H) of the
recording or reproduction apparatus of optical
recording media, said main circuit board providing
10 the current (IL11, IL21) for regulating the light
power of a laser (LD1 or LD2).